

Houston, TX 06/13/19

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0 **Automated Report**

Technical Report for

Intercontinental Terminals

CARDILCL: Deer Park Release

SGS Job Number: TD40233

Sampling Date: 06/06/19



Cardno

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ATTN: Cheryl Hennessy

Total number of pages in report: 19



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

John Watson **Technical Director**

1/1/1

Client Service contact: Erika Garcia 713-271-4700

Certifications: TX (T104704220-19-32) AR (14-016-0) AZ (AZ0769) FL (E87628) KS (E-10366) LA (85695/04004) NJ (TX010) OK (2018-129) VA (10171)

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Sample Summary

Intercontinental Terminals

Job No:

TD40233

CARDILCL: Deer Park Release

Sample	Collected			Matr	ix	Client
Number	Date	Time By	Received	Code	Type	Sample ID
TD40233-1	06/06/19	15:30	06/06/19	AQ	Water	WW-20190606-002-DAY31

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Intercontinental Terminals Job No TD40233

Site: CARDILCL: Deer Park Release Report Date 6/10/2019 4:24:51 PM

1 Sample was collected on 06/06/2019 and received intact at SGS North America Inc (SGS) Houston on 06/06/2019 and properly preserved in 1 cooler at 17 Deg C. The sample received an SGS job number of TD40233. A listing of the Laboratory Sample ID, Client Sample ID, and date of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

General Chemistry By Method ASTM D6503-99

Matrix: AQ Batch ID: MB18180

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.

General Chemistry By Method SM 3500CR B-2011

Matrix: AQ Batch ID: GN98969

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.

Monday, June 10, 2019

Samples TD40141-2DUP, TD40141-2MS were used as the QC samples for Chromium, Hexavalent.

SGS certifies that this report meets the project requirements for analytical data produced for the samples as received at SGS and as stated on the COC. SGS certifies that the data meets the Data Quality Objectives for precision, accuracy and completeness as specified in the SGS Quality Manual except as noted above. This report is to be used in its entirety. SGS is not responsible for any assumptions of data quality if partial data packages are used.

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Summary of Hits Job Number: TD40233

Account: Intercontinental Terminals
Project: CARDILCL: Deer Park Release

Collected: 06/06/19

Lab Sample ID Client Sample ID Result/ Analyte Qual RL MDL Units Method

TD40233-1 WW-20190606-002-DAY31

No hits reported in this sample.

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Sample Results

Houston, TX

Report of Analysis

4

Report of Analysis

Client Sample ID: WW-20190606-002-DAY31

 Lab Sample ID:
 TD40233-1
 Date Sampled:
 06/06/19

 Matrix:
 AQ - Water
 Date Received:
 06/06/19

 Percent Solids:
 n/a

Project: CARDILCL: Deer Park Release

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chromium, Hexavalent	< 0.010	0.010	mg/l	1	06/06/19 18:45	PA	SM 3500CR B-2011
Enterococci	< 1	1	mpn/100m	11	06/06/19 17:02	MS	ASTM D6503-99



Section 5

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

• Chain of Custody

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	CCC				CHAI	N C	F (CU	ST	О	D	Y												_ 0	F
	OUO				10165 Har	win Dr. S	te 150 Hr	uston	TX	77036	5					FED 6	X. Tracki	ng#			Bottle C	order Control	*		
						3-271-470		713-								SGS A	ccutest C	2uote#			SGS Ac	cutest Jab #	TD	Ja	733
	Client / Reporting Informa	ition			Project	7.5.5	77	om						-6					Rec	uested	Ana	lvene	110	10	Matrix Codes
Compa	any Name		Project Name														T	T	T		T	T	T	T	IIIdan Gadea
	Continental Terminal Co																								
	Address		Street				AL I							197								1 1			DW - Drinking Water GW - Ground Water
1943	Battleground Rd.					Billing	informati	on (if	diffe	rent f	from i	Repo	rt to)												WW - Water
City	State	Zip	City		State	Compar	y Name																		SW - Surface Water SO - Soil
	Park TX	77536				ļ										- 2					1 1			SL- Sludge SED-Sediment	
53362	t Contact E-mail		Project #	Project # Street Address Client Purchase Order # Can. State. 7to.					22	Epichlerohydrin by 82 60 Enterococci	Ę				1 1			Ol - Oil							
Phone	ryl Henne: Cheryl.Randle@		Client Purchase C						- <u>≵</u>		불				1 1			LIQ - Other Liquid AIR - Air							
110.16	*	Fax#	Cilcin r dronage c	nder#		City					State	3		Z	p	₮		Į,							SOL - Other Solid WP - Wipe
Sampl	er(s) Name(s)	Phone #	Project Manager			Attention					_	-				┦ 🕏	-5	5			1 1				FB-Field Blank
Bre	H McLees															1	8	Hexavalent Chromium							
				Coll	lection			-	1.	_	ber of		ved Sol	ttles	Luci] ∄	8	\ V	P					1 -	
SGS Accutest							# of	_	NaOH	HNO3	H2SO4	NONE Di Water	10	HBOA	ENCORE	<u>£</u>	Enterococci	ex	690						
Sample #	Field ID / Point of C	Collection	Date	Time	Sampled By	Matrix	bottles	ž	NaOH PANA	S E	Ÿ.	8 2	MEO	A N	20 2	<u>5</u> Щ	ш	I	0		_	\perp		_	LAB USE ONLY
\Box	WW - Z0190606 -00	2 - DAY 31	6/6/19	1530	BM	M	1	Ш					Ш			K	X								
i	44-20190606-00	2-14431	6/6/19	1530	BM	W	1					X						X							
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1000	Tumaround Time (Business	days)					_			_	_	le Inf	ormat	_		0.0		-		Cor	nments	/ Special I	nstruction	5	
	Standard 5 Day RUSH		Approved By (SGS	Accutest PM): / Dat	e:		Commer Commer								P Form	at	tob to compresse spectateropydran								
	4 Day RUSH						FULT1 (~,		$\tilde{\Box}$												
	3 Day RUSH						REDT1)															
	2 Day RUSH	c shed held	,——				Commer					_													
	Emergency & Rush T/A data availab		٥										ults O	-	Summa	nv.									
	Entergency or Near 17/3 odla availab	AN FORMIK			Form: SM021				Comn	nercia	il "C" :	= Res	sults +	QC 8	Surro	gate Sur									
	and the Alexander	Date To	San	nple Custody r	nust be docum	nented b	Date Tim				es ch inquisi			sessi	ion, in	cluding	courie	er deliv	Date To	0.0	Receive		9 0		Date Time:
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Reli 3	inquished by Sampler:	Date Time:		Received By:			Date Tim	Date Time: Relinquished By:							Date Ti	lme;	Receive 4	ed By:			Date Time:				
-				275000000			4					-													

TD40233: Chain of Custody Page 1 of 3

Page 1 of 2

SGS Sample Receipt Summary

Job Number: TD40233		Client:	: INTERCONTINENTAL TERMINAL CO			MINAL CO	NAL CO Project:						
Date / Time Received: 6/6/20	19		Delivery I	Method:									
No. Coolers: 1	Therm ID:	IR-4;					Temp Adjustment Factor:	0;					
Cooler Temps (Initial/Adjusted): #1: (17/·	17);				_							
Cooler Security Y	or N			<u>Y o</u>	r N	Sample Integr	rity - Documentation	<u>Y</u>	or	N_			
Custody Seals Present:		3. COC P		\checkmark		1. Sample label	Is present on bottles:	\checkmark					
2. Custody Seals Intact:	<u> </u>	Smpl Date	s/Time OK	\checkmark		2. Container lab	peling complete:	\checkmark					
Cooler Temperature	Y or N	_				3. Sample conta	ainer label / COC agree:	\checkmark					
1. Temp criteria achieved:	v]				Sample Integ	rity - Condition	<u>Y</u>	or	N			
Cooler temp verification:						1. Sample recv	d within HT:	✓					
3. Cooler media:	Ice (Bag)				2. All containers	s accounted for:	✓					
Quality Control Preservation	Y or N	N/A		WTB	STB	3. Condition of	sample:		Intac	1			
1. Trip Blank present / cooler:						Sample Integ	rity - Instructions	<u>Y</u>	or	N	N/A		
2. Trip Blank listed on COC:		✓				1. Analysis req	uested is clear:	✓		П			
3. Samples preserved properly:	v]				2. Bottles rece	ived for unspecified tests			✓			
4. VOCs headspace free:	ПГ					3. Sufficient vo	lume recvd for analysis:	✓					
						4. Compositing	instructions clear:				✓		
						5. Filtering inst	tructions clear:				\checkmark		

Comments

TD40233: Chain of Custody Page 2 of 3

Page 2 of 2

Job #: TD40233 **Date / Time Received:** 6/6/2019 4:55:00 PM Initials: SJ

Sample Receipt Log

Client: INTERCONTINENTAL TERMINAL CO

Cooler #	Sample ID:	Vol	Bot #	Location	Pres	рН	Therm ID	Initial Temp	Therm CF	Corrected Temp
1	TD40233-1	250ml	1	3G	N/P	Note #2 - Preservative check not applicable.	IR-4	17	0	17
1	TD40233-1	Spec Cup	2	MICRO	Na2S2O3	Note #2 - Preservative check not applicable.	IR-4	17	0	17

TD40233: Chain of Custody Page 3 of 3



Section 6

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries



METHOD BLANK AND SPIKE RESULTS SUMMARY GENERAL CHEMISTRY

Login Number: TD40233 Account: ITCTXDP - Intercontinental Terminals
Project: CARDILCL: Deer Park Release

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Chromium, Hexavalent Enterococci	GN98969 MB18180	0.010	0.0	mg/l mpn/100ml	.1	0.10	102.0	90-108%

Associated Samples: Batch GN98969: TD40233-1 Batch MB18180: TD40233-1 (*) Outside of QC limits

DUPLICATE RESULTS SUMMARY GENERAL CHEMISTRY

Login Number: TD40233 Account: ITCTXDP - Intercontinental Terminals Project: CARDILCL: Deer Park Release

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Chromium, Hexavalent	GN98969	TD40141-2	mg/l	0.0	0.0	0.0	0-11%

Associated Samples: Batch GN98969: TD40233-1 (*) Outside of QC limits

MATRIX SPIKE RESULTS SUMMARY GENERAL CHEMISTRY

Login Number: TD40233 Account: ITCTXDP - Intercontinental Terminals
Project: CARDILCL: Deer Park Release

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Chromium, Hexavalent	GN98969	TD40141-2	mg/l	0.0	.1	0.10	104.0	80-120%

Associated Samples:

Batch GN98969: TD40233-1 (*) Outside of QC limits (N) Matrix Spike Rec. outside of QC limits





General	Chemistry
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Raw Data

1

Hexavalent Chromium

Bottle	Sample#	Sample Absorbance	BKGRD Abs	CCV/CCB Times	Y Values Corr Sample Absorbance	X Values Conc(mg/l)	Final Vol.	Sam Vol.	Dilution	Final Conc.	Units	MDL	RDL
	Test Title:	XCr			1			Method	SM18 CF	RD.			
	GN Batch:	GN98969											
	Analyst:	PA *											
	Prep Date:	6/6/2019	9:05	18:45		Note: Use	4 for CLF	list poi	nter, 1 to	r reg. List point	er.		
	Analysis Date:	6/6/2019											
	Instrument ID:	WC SPEC1	F 128							Com Coof	0.99875		
						0.0000				Corr. Coef:	0.95015		
	Cal. Blk.	<u>0</u>	NA	NA	0,000	0.0000				Clanar	0.9613		
	0.01	0.011	NA	NA	0.011					Slope:	0.5015		
	0.05	0.046	NA	NA	0.046	0.0500				V *-4	-0.0019		
	0.1	0.097	NA	NA	0.097	0.1000				Y intercept:	-0.0019		
	0.2	0.176	NA	NA	0.176	0.2000							
	0.4	0.389	NA	NA	0.389	0.4000							
			NA	NA				Sam. Vol	_				DDI
			NA	NA			<u>(ml)</u>	<u>(ml)</u>	Dilution	Final Conc.	<u>Units</u>	MDL	RDL
	ICV	0.095	NA	NA	0.095	0.1008	NA	NA	NA	NA	mg/l	0.002	0.010
	ICB	0.000	NA	NA	0.000	0.0020	NA	NA	NA	NA	mg/i	0.002	0.010
	GN98969-MB1	0.000	0.000	NA	0.000	0.0020	25.0	25.0	1	0.002	mg/l	0.002	0.010
	GN98969-B1	0.096	0.000	NA	0.096	0.1019	25.0	25.0	1	0.102	mg/l	0.002	0.010
1	GN98969-S1	0.098	0.000	NA	0.098	0.1040	25.0	25.0	1	0.104	mg/l	0.002	0.010
1	GN98969-D1	0.004	0.000	NA	0,004	0,0062	25.0	25.0	1	0.006	mg/l	0.002	0.010
1	TD40141-2	0.004	0.000	NA	0.004	0.0062	25.0	25.0	1	0.006	mg/l	0.002	0.010
	CCV	0.285	0.000	NA	0.285	0.2985	25.0	25.0	1	0.298	mg/l	0.002	0.010
	ССВ	0.000	0.000	NA	0.000	0.0020	25.0	25.0	1	0.002	mg/l	0.002	0.010
1	TD40233-1	-0.004	0.000	NA	0.000	0.0020	25.0	25.0	1	0.002	mg/l	0.002	0.010
	CCV	0.281	0.000	NA	0.281	0.2943	25.0	25.0	1	0.294	mg/l	0.002	0.010
	CCB	0.000	0.000	NA	0.000	0.0020	25.0	25.0	1	0.002	mg/l	0.002	0.010

Pt ululy E1406/07/19

Hexavalent Chromium

SW846 7196A, SM3500 C-D online, SM3500 Cr -B online

Date/Time:	6/19	09:05
	1 7	

Instrument: WC SPEC1

Analyst:

Standard C	urve
CONC, mg/L	ABS
0	Dec F
0.010	0000
0.050	0046
0.100	0.041
0.200	Pilip
0.400	2384

Sources Primary Std. GN 191229 2nd Source 10%H2SO4 DiPhenCarb Spike Std. pH Lot No.

Lab Number	Initial pH	Final pH	Bottle Number	Initial Wt / Vol	Final Vol, mL	Dilution Factor	Percent Solids	Absorb
W) pri pri		Namber	25	25	7	Condo	0005	
40B				Ì			0	0 100
N 98969- MBI							A1 1512	0 HT
1-81					1/6	413	12-	0.04
-51	7		(16/1	K-	0198
U-0/	7		1			115	7-	0 004
TD40141-2	1		1			1110	25	0 004
COU			i,				1 3	0.28
CCB	-		-	V	J	Y	= 90,	0000
D40233-1	7		1	25	25	4		0.002
COU								0,299
US					+	1 time		01002
				1				
			.)					
diff.	1-6					01	,	
174						A 6	4/19	
						/	1	
			- 1					•

Reviewed by:_ Laboratory Notebook: WC2017-083

Data Scanned \Box

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Form: GN017-3

Enterococci

MB1 8180

· _ 11 131 1	No ALAM	ASTM-D6503-9	9	14101018	<i>3</i>
Qauntitray 2000	Lot#: 6000	Exp Date:		Batch	
Dilution Water		Exp Date: NA	T	Pipette ID N P	
Enterolert Media	Lot#: 1P400	Exp Date: /2-/8/19	/	Incubator#	e41+1-04
Pos. Control Organism Enterococcus Faecium	Lot#: 5mB 32-2	Exp Date: 6 - 30 -19	Positive	□ Negative	Transfer or Texas
			ResCl2 Test	Strip Lot#:	-18-18
Sample ID	Sample Volume mLs	Flourescent Wells Counted	Dilution Factor	Result (MPN/100 mL)	Residual CL2
+	100	48 small		22419.6	Bullows
omments:					
+/-	100	large Small		41	1 1 500
omments:					
	100	large small		41	
omments:	(00	O			
		() large			
14	100	O small		1	
omments:					
1)40233-1	100	large Small		41	□ Pres. □ Abs.
omments:			2		
	-	large	- 11/4		□ Pres. □ Abs.
omments:			-		
1		large			□ Pres. □ Abs.
MS L	6-19	small		-	
omments:					

Form: MB005-06; 02/13/19

Analyst / Date / Time Run	6	,10	1	MS	17	102	Analyst / Date / Time Re	ad 6-7-19	MS	V7:02
Peer Review By / Date		E	6	107	119		Supervisor Signature	ETH		la .



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